



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 1

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BOSTON, MA 02109-3912

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

DEC 22 2009

Terry Veysay, President
Dragon Products Company
38 Preble Street, P.O. Box 1521
Portland, Maine 04104

Re: Clean Air Act Reporting Requirement and Testing Order, Docket No. AAA-10-0003

Dear Mr. Veysay:

The United States Environmental Protection Agency ("EPA") is evaluating whether Dragon Products Company ("Dragon") in Thomaston, Maine is in compliance with the Clean Air Act (the "Act") and state and federal regulations promulgated under the Act. These requirements include the federally enforceable sections of the Maine State Implementation Plan, the nonattainment New Source Review ("NSR") and Prevention of Significant Deterioration ("PSD") programs, and the Title V operating license program.

Section 114(a)(1) of the Clean Air Act, 42 U.S.C. Section 7414(a)(1), gives EPA the authority to require an emission source to submit such information as EPA may reasonably require to determine the source's compliance with the Act. This letter contains both a reporting requirement and a testing order.

Reporting Requirement

Within thirty (30) days of receiving this letter, Dragon is hereby required to provide for its Thomaston facility all of the information outlined below. In answering technical questions, Dragon shall submit its responses in an electronic format consistent with and able to be manipulated by Microsoft Excel.

1. For each year between 1990 and 2008, provide:
 - a. Daily kiln and calciner fuel feed rate (calculated as a daily average in tons/day). Specifically:
 - i. Provide the tons of coal used per day;
 - ii. Provide the tons of coke used per day; and
 - iii. Provide the tons of any other fuel combusted per day.

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- b. Heat content for each fuel used (calculated as a daily average in British Thermal Units ("BTU")/ton of fuel). Specifically:
 - i. Provide the average daily heat content per ton of coal;
 - ii. Provide the average daily heat content per ton of coke; and
 - iii. Provide the average daily heat content per ton of any other fuel combusted.
- c. Total monthly kiln heat input (in BTU/month);
- d. Daily raw material feed rate (in tons/day);
- e. Type and percentage of each raw material used (daily);
- f. Daily raw feed to clinker conversion rate;
- g. Regarding fuel distribution, if fuel is injected at more than one location, indicate how much fuel is injected at each location (daily average);
- h. Ammonia, oxygen ("O₂"), and sulfur dioxide ("SO₂") concentrations (dry basis) and mass rates for the kiln (daily average for concentrations and daily totals for mass rates) as measured by the continuous emissions monitoring systems ("CEMs");
- i. Flue gas volumetric flow rate (daily average in dry standard cubic feet per minute ("dscfm") and actual cubic feet per minute ("acfm"));
- j. Kiln flue gas temperature at the inlet to the fabric filter or at the kiln stack (daily average);
- k. Temperatures measured in or near the burning zone (daily average);
- l. Exhaust gas temperature at or near the top of the pre-heater tower (daily average);
- m. Primary (and secondary and tertiary, where available) rate of air flow into the kiln, preheater and/or precalciner (as applicable, calculated as a daily average) or daily blower/fan settings;
- n. Feed burnability (daily average) using tricalcium silicate as the relative index;
- o. Documentation including the date, time, duration, cause and steps taken to address any Startup, Shut Down, or Malfunction events in which Dragon failed to meet any applicable requirements of its Title V operating license;
- p. An explanation of any gaps in the data or missing data.

2. For each year between 1990 and 2008 provide the nitrogen oxides (“NO_x”) emissions data that Dragon reported to the state of Maine in its annual emissions statement.
 - a. Year by year, explain the method used to generate this data;
 - b. Indicate if the data comes from emission factors (such as AP-42), CEMs, or other sources;
 - c. Explain in detail any calculations or conversions that Dragon used in reporting the data;
 - d. Note the molecular form of the data (i.e., nitrogen oxide (“NO”) or nitrogen dioxide (“NO₂”)).
3. For each year between 1990 and 2008, provide the make, model, and operational specifications of all NO_x CEMs and Data Acquisition Systems (“DAS”) Dragon has used or is currently using. In addition:
 - a. Indicate the molecular form (i.e., NO or NO₂) of the CEMs data;
 - b. Attached in Appendix B is the NO_x emissions summary data that Dragon provided to EPA in March 2009. For the yellow highlighted rows, indicate the molecular form of this NO_x data (i.e., NO or NO₂);
 - c. Provide a detailed explanation of each data field (parameter) that is monitored by the CEMs. Explain how that parameter is collected and/or calculated and how its value is stored including relevant data retention policies;
 - d. Provide all internal, state, federal or vendor provided documents relating to Dragon’s CEMs and DAS including training, operation, calibration and certification; and
 - e. Provide all internal, state, federal or vendor provided documents relating to Dragon's CEMs and DAS including training, operation, calibration and certification. Include all:
 - i. Relative accuracy tests, continuous emissions monitoring system certification tests and all other compliance tests or reference method testing results for NO, NO₂ and/or NO_x; and
 - ii. Methods, procedures or specifications used to certify, calibrate, operate or maintain NO_x CEMs other than those methods specified under 40 CFR 60 or in EPA Reference Method 7 or 7E.
4. Dragon’s current Title V operating license contains an emission limit for NO_x (in NO₂ equivalents) of 1533 tons per year. Describe, in detail, how Dragon demonstrates compliance with this limit, including how the CEMs measure emissions of NO_x and what annual emission rate of NO_x Dragon must stay below in order to comply with this license

limit. Describe how the CEMs record NO_x data and exactly what calculations Dragon uses to determine these emissions in NO₂ equivalent units.

5. The Title V operating license requires that Dragon perform an evaluation of the NO_x CEMs system under PS-2 in 40 CFR Part 60, Appendix B¹. If Dragon has tested the CEMs using PS-2, identify the dates of all tests and submit all documents associated with these tests. Please clearly state if Dragon has not tested the CEMs using PS-2 in 40 CFR Part 60, Appendix B.
6. Provide a copy of any test report concerning the determination of ammonia slip from the cement kiln exhaust. Dragon need not provide EPA with a copy of the 2006 report: "Determination of Ammonia Slip from the Cement Kiln Exhaust."
7. In addition, Dragon shall provide:
 - a. All surveys, submissions, reports or other information provided by Dragon to the Portland Cement Association from 1985 to the present;
 - b. All specifications, drawings, memorandums, vendor communications, vendor guarantees, budget documents, purchase orders or requisitions and other all documents containing information about the following projects:
 - i. All physical or operational changes to the kiln burners and coal supply system between 1990 and 2003;
 - ii. All physical or operational changes to the clinker cooler and all equipment connecting to the clinker cooler between 1990 and 2003;
 - iii. All physical or operational changes to facilitate the use of cement kiln dust or other waste materials in clinker production between 1990 and 2003;
 - iv. All physical or operational changes to any fans that provided forced or induced draft including combustion air to the kiln between 1990 and 2003; and
 - v. All documents, from 2001 to the present, related to the construction of the precalciner kiln system and any subsequent changes or modifications to the precalciner kiln system after initial construction.
 - c. All information on the original design and any subsequent revision(s), and the date(s) of such revision(s) to design specification and/or capacity of:
 - i. The burner or burners in the kiln;
 - ii. Coal mill, coal feeders, coal classifiers, coal mill fans, coal transfer equipment for the kiln; and
 - iii. All fans supplying air to kiln burners and/or the coal system.
 - d. All information on the original design and any subsequent revision(s), and the date(s) of such revision(s), to design specification and/or capacity of:

¹ From Title V license page 7: "Documentation that the COM, SO₂, and NO_x CEMs are continuously accurate, reliable and operated in accordance with Chapter 117, 40 CFR Part 51 Appendix P, and 40 CFR Part 60 Appendices B and F."

- i. The clinker cooler;
 - ii. All fans supplying air to the clinker cooler; and
 - iii. All fans/ducts and connections returning air to the kiln system from the clinker cooler.
- e. All information on the original design and any subsequent revision(s), and the date(s) of such revision(s) to design specification and/or capacity of:
 - i. Any fans that provided forced or induced draft to the kiln; and
 - ii. Any fans that provided combustion air to the kiln.
- f. For each year between 1990 and 2008, indicate the date, duration, and cause of any forced (unplanned) outage. Indicate what physical and/or operational changes were made prior to bringing the unit back online. State whether Dragon prepared pre or post outage reports. If so, provide copies of such reports.
- g. For each year between 1990 and 2008, indicate the date, duration, and cause of any planned (scheduled) outage. Indicate what physical and/or operational changes were made prior to bringing the unit back online. State whether Dragon prepared pre or post outage reports. If so, provide copies of such reports.

Testing Order

This Testing Order ("TO") requires Dragon to sample and test emissions of NO_x and ammonia slip from the cement kiln at the Thomaston, Maine facility. Within the number of days specified in each paragraph below, Dragon is required to provide all the information and take the steps outlined below.

1. Within seven (7) days of receipt of this TO, contact EPA's Bill Osbahr, at (617) 918-8389, to schedule a pre-test conference. At the pre-test conference, EPA will review with Dragon the various sampling, monitoring, testing, and analysis locations, procedures, and methods to be followed on the date(s) of the tests.
2. Within thirty (30) days of receipt of this TO, prepare and mail to EPA a testing protocol, subject to EPA approval, for testing NO_x emissions and ammonia slip from the cement kiln.
3. Within sixty (60) days of receipt date of this TO, attend a pre-test conference with EPA, and schedule the testing date(s).
4. Within ninety (90) days of receipt of this TO, conduct testing according to the procedures in the approved test protocol.
5. Within thirty (30) days of completing each test, submit a complete test report to EPA.
6. Dragon shall calculate the ammonia injection rate by molar ratio. Dragon shall begin

with the calculated average uncontrolled baseline NO_x emission rate and calculate the molar ratio as follows: *Mass of Ammonia Injected / Mass of NO_x = Molar Ratio*. Dragon will provide, as part of the testing protocol, a detailed description of how the average uncontrolled baseline emission rate will be calculated.

7. During the tests of the cement kiln:
 - a. Dragon shall operate the kiln in a manner which is representative of normal operation. Feed rates, components and procedures shall be consistent with those documented for the kiln within the prior twenty-four (24) months. Production rate shall be at least 85% of the maximum production rate of the kiln, and operating parameters including air rates, temperatures and operating procedures shall be consistent with maximum normal operating conditions during the prior twenty-four (24) months of operation. Dragon shall document any deviation from the normal representative operation of the kiln and provide an explanation in writing;
 - b. Dragon shall operate the SNCR in an effort to minimize NO_x emissions. Dragon shall test the emissions of NO_x under two selective non-catalytic reduction ("SNCR") technology operating scenarios:
 - i. First, Dragon shall run the SNCR system while injecting ammonia at a molar ratio of 0.75 to 0.85 for three, 3-hour test runs (yielding a total of 9-hours of data); and
 - ii. Second, Dragon shall run the SNCR system while injecting ammonia at a molar ratio of 1.2 for three, 3-hour test runs (yielding a total of 9-hours of data).
8. The tests shall be conducted using EPA approved methods and performance specifications. To measure ammonia slip, Dragon shall use Conditional Test Method ("CTM") 027.
9. The tests shall follow the April 27, 2009 stack test guidance which can be found at: <http://www.epa.gov/compliance/resources/policies/monitoring/caa/stacktesting.pdf>

Attachment A to this TO provides lists of required elements for pre-test protocols and test reports.

If Dragon does not provide the requested information, EPA may order it to comply and may assess monetary penalties under Section 113 of the Clean Air Act. With its response, Dragon shall provide a Statement of Certification, in the form attached, by a responsible corporate officer. Federal law establishes criminal penalties for providing false information to EPA.

For information about designating the information you submit as confidential business information, see attached Confidential Business Information Enclosure.

This reporting requirement and testing order is not subject to Office of Management and Budget review under the Paperwork Reduction Act, and applies to Dragon and its partners, officers, employees, agents, successors and assigns.

Please submit the above-required information to:

Susan Studlien, Director
Office of Environmental Stewardship
U.S. Environmental Protection Agency, Region 1
5 Post Office Square, Suite 100
Mail Code OES04-2
Boston, MA 02109-3912
Attn: Christine Sansevero, Senior Enforcement Coordinator, Air Technical Unit

If you have any questions regarding this letter, please contact Christine Sansevero, at (617) 918-1699, or have your attorney call Gregory Dain, Senior Enforcement Counsel, at (617) 918-1884.

Sincerely,

A handwritten signature in blue ink that reads "Dan Silverman, acting for".

Susan Studlien, Director
Office of Environmental Stewardship

cc: Kurt Tidd, ME DEP
Jon Jewitt, Esq., GCI
Brad Levine, DOJ
Steve Holt, Dragon

Enclosures

**SECTION 114 REPORTING REQUIREMENT TO DRAGON PRODUCTS COMPANY
STATEMENT OF CERTIFICATION**

STATEMENT OF CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

(Signature)

(Title)

(Date)

SECTION 114 REPORTING REQUIREMENT TO DRAGON PRODUCTS COMPANY CONFIDENTIAL BUSINESS INFORMATION ENCLOSURE

You may assert a business confidentiality claim covering all or part of the information you provide in response to this information request for any business information entitled to confidential treatment under Section 114(c) of the Clean Air Act (the Act), 42 U.S.C. § 7414, and 40 C.F.R. Part 2, subpart B. Under Section 114(c) of the Act, you are entitled to confidential treatment of information that would divulge methods or processes entitled to protection as trade secrets. Under 40 C.F.R. Part 2, subpart B, business confidentiality means “the concept of trade secrecy and other related legal concepts which give (or may give) a business the right to preserve the confidentiality of business information and to limit its use or disclosure by others in order that the business may obtain or retain business advantages it derives from its rights in the information.” See 40 C.F.R. § 2.201(e).

The criteria EPA will use in determining whether material you claim as business confidential is entitled to confidential treatment are set forth at 40 C.F.R. §§ 2.208 and 2.301. These regulations provide, among other things, that you must satisfactorily show that: (1) the information is within the scope of business confidentiality as defined at 40 C.F.R. § 2.201(e), (2) that you have taken reasonable measures to protect the confidentiality of the information and that you intend to continue to do so, (3) the information is not and has not been reasonably obtainable by legitimate means without your consent, and (4) the disclosure of the information is likely to cause substantial harm to your business’s competitive edge. See 40 C.F.R. § 2.208 (a)-(d). Emission data, as defined at 40 C.F.R. § 2.301(a)(2), is expressly not entitled to confidential treatment under 40 C.F.R. Part 2, subpart B. See 42 U.S.C. § 7414(c); 40 C.F.R. § 2.301(e).

Information covered by a claim of business confidentiality will be disclosed by EPA only to the extent, and by means of the procedures, set forth in Section 114(c) of the Act and 40 C.F.R. Part 2, subpart B. EPA will construe your failure to furnish a business confidentiality claim with your response to this information request as a waiver of that claim, and the information may be made available to the public without further notice to you.

To assert a business confidentiality claim, you must place on (or attach to) all information you desire to assert as business confidential either a cover sheet, stamped or typed legend, or other suitable form of notice employing language such as “trade secret,” “proprietary,” or “company confidential” at the time you submit your response to this information request. Allegedly confidential portions of otherwise non-confidential documents should be clearly identified, and may be submitted separately to facilitate identification and handling by EPA. You should indicate if you desire confidential treatment only until a certain date or until the occurrence of a certain event.

In addition, EPA is providing you notice that if you assert a claim of business confidentiality for information you provide in response to this information request, EPA will determine whether such information is entitled to confidential treatment, pursuant to 40 C.F.R. Part 2, subpart B. Accordingly, after EPA’s receipt of your business confidentiality claim, you will receive a letter inviting your comments on the following questions:

1. What specific portions of the information are alleged to be entitled to confidential treatment? Specify by page, paragraph, and sentence when identifying the information subject to your claim.
2. For what period of time do you request that the information be maintained as confidential, e.g., until a certain date, until the occurrence of a specified event, or permanently? If the occurrence of a specific event will eliminate the need for confidentiality, specify that event. Additionally, explain why the information should be protected for the time period you've specified.
3. What measures have you taken to protect the information claimed as confidential from undesired disclosure? Have you disclosed the information to anyone other than a governmental body or someone who is bound by an agreement not to disclose the information further? If so, why should the information still be considered confidential?
4. Is the information contained in any publicly available material such as the Internet, publicly available databases, promotional publications, annual reports, or articles? Is there any means by which a member of the public could obtain access to the information? Is the information of a kind that you would customarily not release to the public?
5. Has any governmental body made a determination as to the confidentiality of the information? If so, please attach a copy of the determination.
6. For each category of information claimed as confidential, explain with specificity whether disclosure of the information is likely to result in substantial harm to your competitive position. Explain the specific nature of those harmful effects, why they should be viewed as substantial, and the causal relationship between disclosure and such harmful effects. How could your competitors make use of this information to your detriment?
7. Is there any other explanation you deem relevant to EPA's determination of your business confidentiality claim that is not covered in the preceding questions? If so, you may provide such additional explanation.

See 40 C.F.R. § 2.204(e)(4). When you receive such a letter, you must provide EPA with a written response within the number of days set forth in the letter. EPA will construe your failure to furnish timely comments as a waiver of your confidentiality claim, consistent with 40 C.F.R. § 2.204(e)(1).

Attachment A to Testing Order

REQUIREMENTS FOR EMISSION TESTING

A. PRETEST INFORMATION REQUIREMENTS

In order to establish uniform requirements and help ensure that proper test methods and procedures are utilized, the information specified below must be submitted to EPA Region I - New England at least 30 days prior to the scheduled test date. In the event of any deficiencies or discrepancies in the test protocol, the company will be notified. Submission of this information will minimize the possibility of a test rejection resulting from improper sampling or data collection procedures.

Except as otherwise provided by EPA, testing shall be performed in strict accordance with procedures specified in the Code of Federal Regulations ("C.F.R."), Title 40, Part 60, Appendix A, Standards of Performance for New Stationary Sources, as amended, or in Title 40, Part 61, Appendix B, National Emission Standards for Hazardous Air Pollutants, as amended. Any variations in the sampling or analytical procedures must be indicated in the pretest information and receive written approval from EPA prior to testing.

The information to be submitted must include at a minimum:

1. Identification and a brief description of the source to be tested. The description should include:
 - a. Type of industrial process or combustion facility;
 - b. Type and quantity of raw and finished materials used in the process;
 - c. Description of any cyclical or batch operations which would tend to produce variable emissions with time;
 - d. Basic operating parameters used to regulate the process; and
 - e. Rated capacity of the process.
2. A brief description of the air pollution control equipment associated with the process, including:
 - a. Type of control device;
 - b. Operating parameters;

- c. Rated capacity and efficiency; and
 - d. Ultimate disposal of wastes.
3. Type of pollutant to be sampled (particulate matter, NO_x, SO₂, hydrocarbons, etc.).
 4. A description of the emission sampling equipment, including a schematic diagram of the sampling train.
 5. A description of the sampling and analysis procedures (reference standard methods, if applicable). Indicate any proposed variations with justification.
 6. A sketch with dimensions indicating the flow of exhaust gases from the process, through the control equipment and associated ductwork to the stack.
 7. In accordance with 40 C.F.R. Part 60, Method 1:
 - a. An elevation view of the dimensions of the stack configuration indicating the location of the sampling ports and distances to the nearest upstream and downstream flow interferences; and
 - b. A cross-sectional sketch of the stack at the sampling location with dimensions indicating the location of the sampling traverse points.
 8. Estimated flue gas conditions at sampling location, including temperature, moisture content, and velocity pressure.
 9. A description of the process and control equipment operating data to be collected during the sampling period.
 10. Copies of the field data sheet forms to be used during the tests.
 11. Names and titles of personnel who will be performing the tests.
 12. A description of the procedures for maintaining the integrity of the samples collected, including chain of custody and quality control procedures.
 13. Calibration sheets for the dry gas meter, orifice meter, pilot tube, and/or any other equipment that requires calibration.
 14. A list of pre-weighed filters to be used during particulate emission testing, including identification and tare weights.

(Note: Items No. 13 and 14 must be submitted prior to actual testing, but do not have to be included with the pretest information.)

B. EMISSION TEST REPORT REQUIREMENTS

The emission test report must contain all pertinent data concerning the tests, including a description of the process and operating conditions under which the tests were made, the results of the tests, and test procedures. While the exact format of the report will vary depending upon the type and objective of the tests, below is a suggested format containing elements that must be incorporated in the report.

1. Introduction
 - a. Identification, location, and dates of tests;
 - b. Purpose of tests;
 - c. Brief description of source; and
 - d. Name and affiliation of person in charge of tests.
2. Summary of results
 - a. Operating and emission data; and
 - b. Comparison with applicable emission regulations.
3. Source description
 - a. Description of process including operation of emission control equipment;
 - b. Flow sheet (if applicable);
 - c. Type and quantity of raw and finished materials processed during the tests;
 - d. Maximum normal rated capacity of the process; and
 - e. Description of process instrumentation monitored during the test.
4. Sampling and analytical procedures
 - a. Description of sampling train and field procedures;
 - b. Description of recovery and analytical procedures;
 - c. Sketch indicating sampling port locations relative to process, control equipment upstream and downstream flow disturbances; and

- d. Sketch or cross-sectional view of stack indicating traverse point locations.
- 5. Test results and discussion
 - a. Detailed tabulation of results including process operating conditions, flue gases conditions;
 - b. Discussion of significance of results relative to operating parameters and emission regulations; and
 - c. Discussion of any divergences from normal sampling procedures or operating conditions which could have affected the test results.
- 6. Calculation and data reduction methods
 - a. Description of computational methods, including equation format used to obtain final emissions results from field data; and
 - b. Sample calculations from at least one run of each type of test performed.
- 7. Appendix
 - a. Copies of all field data collected during the test, including sampling data sheets and process operating logs;
 - b. Copies of all analytical laboratory data;
 - c. Calculation sheets or computer input and output data;
 - d. Sampling equipment and laboratory calibration data;
 - e. Names and titles of personnel and organizations participating in the tests;
 - f. Visible emission observations performed during the tests (if required); and
 - g. Copies of all chain of custody information.